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Subject: Chemical Makers Must Plug Leaks of Carcinogen Ethylene Oxide

https://news.bloomberglaw.com/environment-and-energy/chemical-makers-must-plug-leaks-of-carcinogen-ethylene-oxide

Environment & Energy Report



Dow Inc.'s petrochemical complex in Louisiana lies in the 80-mile stretch of the Mississippi River between Baton Rouge and New Orleans often dubbed "Cancer Alley" for being one of the most polluted areas in the country. The area is shown here in October 2013.

Photographer: Giles Clarke/Getty Images

Chemical Makers Must Plug Leaks of Carcinogen Ethylene Oxide

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- Expected cuts more than 10 times lower than in 2019 proposal
- Most cuts come from leaking vents, storage tanks

Chemical companies will have to take additional measures to plug releases of the carcinogenic ethylene oxide gas and other toxic air pollutants, in the first update to the sector's hazardous pollutant standards in more than a decade.

The Environmental Protection Agency rule, released Monday, requires (RIN 2060–AT85) chemical manufacturing facilities to plug ethylene oxide releases from storage tanks, process vents, and equipment.

"EPA evaluated the risks posed by air toxics from this source category and determined cancer risks for this source category to be unacceptable," the agency said in a press release. It deemed ethylene

oxide a carcinogen in 2016. People living near some of the plants releasing ethylene oxide have pressured the EPA to take action.

These plants, which are mostly concentrated in Texas and Louisiana, use ethylene oxide to make a range of products including adhesives, textiles, plastics, detergents, and antifreeze. The flammable, colorless gas can harm eyes, lungs, brain, and the nervous system under prolonged exposure to higher concentrations.

The updated standards for the chemical sector are expected to reduce ethylene oxide emissions by 0.76 tons each year, the EPA said. That is lower than the expected 10 tons in reduced ethylene oxide emissions the agency had estimated in its 2019 proposal for the sector.

150 Other Pollutants

The rule will also require these companies to limit at least 150 other toxic air pollutants their plants may emit, including formaldehyde, acrolein, benzene, and 1,3 butadiene.

The EPA said the final rule is expected to reduce emissions of hazardous air pollutants from companies making organic chemicals by 107 tons per year—down from the 116 tons proposed in November. Additional cuts in excess toxic air pollutants from the flares of these facilities could result in another 260 tons reduced each year, the EPA said.

The reductions come with a price tag of \$42.7 million, with the lion's share of the cost stemming from plugging ethylene oxide releases.

Monday's action marks the first EPA update to national hazardous air pollutant limits for the chemical manufacturing sector since 2006.

The agency was under a court-ordered deadline to issue the revised limits by March, but it bought more time to finalize the regulation due to delays caused by the coronavirus pandemic. EPA Administrator Andrew Wheeler signed the final rule May 29, and the agency released it Monday.

Dow, Huntsman

Most of the 201 facilities covered by the EPA regulation are concentrated in Texas and Louisiana, with major emitters also located in West Virginia, Illinois, Delaware, South Carolina, and Kentucky.

Six of the top ten emitters of this chemical are in Texas, the remaining four are located in Louisiana, an analysis of EPA's latest emissions data show.

The data shows that Dow Inc.'s Union Carbide plant in Louisiana's St. Charles Parish is the largest emitter of this carcinogenic gas, followed by Huntsman Corp.'s Port Neches plant in Port Arthur, Texas.

Both Dow and Huntsman have said that they are taking steps to limit releases of ethylene oxide into the surrounding areas.

No Impact on Medical Sterilizers

Under the rule, EPA is requiring companies to improve their work practices during startups, shutdowns, and malfunctions, and specifically address ethylene oxide releases from storage tanks, and emissions and leaks at facilities using the gas.

The nonprofit Environmental Integrity Project told the EPA not to ignore releases of these toxic chemicals when equipment malfunctions during startups and shutdowns, as that is when the highest amounts are released into the air.

Ethylene oxide also is used as a medical sterilizer. Several medical device sterilization facilities shuttered over neighborhood health concerns have reopened in recent months to help with medical equipment sterilization during the coronavirus pandemic. But the new rule applies only to chemical manufacturers, not companies that use ethylene oxide.

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